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ABSTRACT

The primary motivation behind this prediction study was the concern voiced over the problem of attrition in graduate school. Noting a 45% dropout rate in psychology doctoral students who began between 1955 and 1964 and were studied in 1968, one author deplored the loss in time and effort to students and faculty when students leave graduate school. Also of interest were possible sex differences in the variables used to select candidates, and in the reasons behind male and female graduate students dropping out. Thus, 123 graduate students entering the University of Washington Department of Psychology between 1963 and 1967 were studied. Although progress toward the Ph.D. was not highly related to admissions data such as GRE scores and undergraduate grades, performance in the first year was found to be predictive of later success. Evidence of sex discrimination was minimal and subtle. It is suggested that greater attention be directed toward measuring commitment to the doctorate to reduce the rather large attrition from the program. (Author/HS)

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University of Washington

May 1972

Doctoral Study Attrition in Psychology[1]

Clifford E. Lunneborg and Patricia W. Lunneborg

Graduate students entering the University of Washington Department of Psychology between 1963 and 1967 (N = 123) were studied. Although progress towards the Ph.D. was not highly related to admissions data such as GRE scores and undergraduate grades, performance in the first year was found to be predictive of later success. Evidence of sex discrimination was minimal and subtle. It is suggested that greater attention be directed toward measuring commitment to the doctorate to reduce the rather large attrition from the program.

[1]The authors thank Carol Lillie (Rater 1) and Virginia de Wolf (Rater 2) for their careful assistance in data collection and for Appendix 1 which they devised.

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Doctoral Study Attrition in Psychology

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The primary motivation behind this prediction study was the concern voiced by Knox (1970) over the problem of attrition in graduate school. Noting a 45% dropout rate in psychology doctoral students who began between 1955 and 1964 and were studied in 1968, Knox deplored the loss in time and effort to students and faculty when students leave graduate school. Also of interest were possible sex differences in the variables used to select candidates, and in the reasons behind male and female graduate students dropping out. Of concern in the profession is the question of whether or not schools discriminate against women in the selection and treatment of graduate students. For example, Payne et al. (1971) found among education Ph.D.s at the University of Georgia that females had higher average predictor scores than men, some differences being quite large, and raised the question of a selection bias, self or institutional. It is important, therefore, to know if both the selection and the "succeeding" process are influenced by sex of student in order to remedy any undesired biases.

The progress folders for all students who entered between 1963-67 the University of Washington psychology Ph.D. program were read and coded independently by two experienced clerk-raters for all predictor data and for criterion data covering the first four years of graduate study only. Where clerk ratings differed, the clerks came to either complete agreement as to the value of a given variable or omitted it.

There were 123 subjects, 85 males and 38 females (31%). Because students entering in 1967, the last year studied, had only four years in

which to provide criterion data, it was decided to limit the study to the first four years for all subjects. Despite the fact that Ph.D.s are believed obtainable in four years, most people seem to take longer: 29% of the present sample, comparable to Knox' 28% completion (in which study most students had longer than four years to reach this goal). Table 1 presents an array of traditional predictors and criteria of graduate success in terms of female and male mean scores. The significance of any observed difference between the sexes was determined by the magnitude of the point-biserial correlation between sex status (1 = female, 0 = male) and the variable in question. The only significant mean differences on admissions data were for undergraduate junior-senior grade point average (3.46 female, 3.24 male), and for Graduate Record Examination Quantitative scores (614 female, 663 male). The only post-admissions difference between the sexes which was significant was lack of financial support during the first year: 24% of the women were unsupported compared to 9% of the men. It is of interest that about 10% of first year students were unsupported given the stated policy of the department to admit only as many students as can be financially supported.

Letters of recommendation were independently rated on a four-point scale and an average score computed for each rater (usually) on the basis of three letters. The two ratings correlated .69. Appendix 1 describes briefly the two rating schemes developed by the raters for this project. Other variables needing explanation include "top-rated ACE dept" which means that the student's bachelor's degree was earned at one of the 73 departments rated by the American Council of Education in 1969 as having

Table 1

Sex Differences in Traditional Predictors and Criteria of Graduate Success

Predictors	Female mean	Male mean	r with sex (female) (decimal points omitted)
Undergrad Jr-Sr GPA	3.46	3.24	25*
GRE-V	646	649	-01
GRE-Q	614	663	-27*
GRE-psych	627	647	-14
Letters of rec--rater 1	1.61	1.34	16
Letters of rec--rater 2	1.46	1.38	05
Top-rated ACE dept	53%	61%	-08
Psych work experience	70%	63%	07
Research objective	56%	53%	03
Master's at entry	11%	14%	-05
Age	23.9	23.7	04
Married at entry	49%	38%	10
Number of children at entry	.25	.11	13
Prior graduate work	34%	37%	-03
Prior UW rejection	28%	35%	-07
Criteria			
First year grad GPA	3.48	3.30	17
Second year cum grad GPA	3.59	3.57	02
Third year cum grad GPA	3.67	3.69	-02
Fourth year cum GPA	3.71	3.65	13
Statistics grade	2.63	2.41	08

Table 1 (continued)

Sex Differences in Traditional Predictors and Criteria of Graduate Success

Criteria	Female mean	Male mean	r with sex (female) (decimal points omitted)
Years financ. unsupported	1.63	1.44	07
Unsupported 1st year	24%	9%	19*
First year evaluation	1.38	1.53	-07
Research credits years one and two	5.61	4.12	11
Total years attendance in four	2.69	3.09	-14
Ph.D. in four years	21%	33%	-12
Finished fourth year wi/o Ph.D.	29%	39%	
Withdrawn in four years	50%	28%	

Note.--Significance of difference between sexes evaluated by significance of point biserial correlation between sex status and measured attribute.

the most effective psychology doctoral programs (Roose and Andersen, 1970). "Psych work experience" meant student indicated on application form that he or she had been employed in jobs which were relevant to the choice of psychology for graduate study, e.g., resident counselor, statistician, psychiatric nurse, summer aide in hospital activity therapy department. "Research objective" meant that on the application form the student had used the words 'research" or "experimental psychology" in describing his career objective.

"Prior UW rejection" meant finding a letter in the student's folder which represented outright rejection at some earlier date, being on an alternate list, or conditional acceptance, i.e., usually the letter of acceptance was straight-forward, congratulatory, and supportive, so that any mention of acceptance being contingent on anything such as completing the bachelor's, grades, specific courses, constituted "prior UW rejection." "Statistics grade" under criteria refers to a two-quarter experimental design sequence required in the first year unless completed elsewhere. "Years financially unsupported" represents a count of the number of years during the first four in which there was no evidence of any kind of financial assistance. Likewise "Unsupported first year" meant no TA or RA or fellowship during the year the student entered graduate study.

"First year evaluation" was only available for 56 students entering in 1965 and 1966. Students received letters from the faculty committee on graduate studies informing them that they were progressing with honors (3 points), progressing satisfactorily (2 points), were allowed to continue with some contingency (1 point), or were dropped from the program (0 points).

"Total years attendance in four" represents length of time in years over the first four in which the student was in residence at UW. (If a student completed a Ph.D. in fewer than four years, he was counted as being in residence the full four years.) While the sexes differed slightly on many admissions and post-admissions indices, the lack of significance to these differences suggests that there is no obvious sex discrimination in graduate selection or progress.

The dropouts within four years numbered 43 or 35% of the total group, not as bad as Knox (1970) found among Southern psychology Ph.D. students. The women dropped out significantly more often than did the men ($x^2 = 4.56$, $p < .05$), but while equal numbers of males left involuntarily because of poor grades (N = 12) and voluntarily (N = 12), the women tended to leave more on a voluntary basis (13 of the 19 dropouts) for reasons such as spouse's decision to move out of the area. Knox (1970) abandoned looking into the question of whether a student left at his request or at the university's request because "the interaction between student and university was considered too complex for categorization." There was not that much complexity within this one department, fortunately, but it should be noted that among the involuntary dropouts were three (of 6) women and one man (of 12) whose grades were satisfactory at the time they were asked to leave. The letters of dismissal referred to other indices of unsatisfactory performance than grade-point average, which boiled down to the fact that none of these students had established a solid working relationship with any faculty member. While a greater percentage of men than women obtained the Ph.D. (see Table 1), the difference was not significant (as it was in Knox' study).

In spite of the known discrepancies among men and women APA members in terms of areas of specialization, there was not that much evidence of channeling at the graduate level. Table 2 suggests that the primary difference in specialization has been a lack of male students in the developmental area.

Table 3 reports the intercorrelations among the principal admissions variables. Noteworthy r's include .49 between GRE-V and GRE-Q, .40 between GRE-V and GRE-psych but only .09 between GRE-Q and GRE-psych, and the lack of relationship between the GRE measures and the undergraduate GPAs of these selected students. To the extent that these measures were used in the selection process, they seem to have been given independent weight.

Correlations of these predictors with four criteria of graduate success appear in Table 4. Undergraduate GPA, letters of recommendation, major, and quality of undergraduate department were correlated positively with first year performance but not with eventual success. The best predictors of the ultimate criterion, the Ph.D., were having a master's degree at entrance, age and marital status (the latter two highly correlated with the first), and first year faculty evaluation. First year graduate grades correlated .74 with first year evaluation, yet only the latter was predictive of the Ph.D.

A number of cross-tabulations within each sex on various admissions indices revealed nothing of significance except that both married men and married women with children were more likely to get a Ph.D. in four years than single students or married students without children (both p's $< .03$).

Table 2

Proportions of Males and Females in Different Areas of Study

	Animal/physiol	Hum Exper/Quant	Clinical	Develop	Other or no area
Males	33	31	26	00	10
Females	29	21	26	13	11
Total	32	28	26	04	10

Table 3

Intercorrelations among Predictors of Success in Graduate School (N = 123)
(Decimal points omitted)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Undergrad Jr-Sr GPA		-05	-06	-11	17	17	22	-14	20	21	12	-13	25	-23	-05
2	GRE-V				49	40	-03	-01	-12	26	-08	01	08	06	-01	-13	03
3	GRE-Q					09	-13	-12	-14	16	-08	-13	-06	-13	-27	-23	-06
4	GRE-psych						-05	-09	28	13	10	19	14	04	-14	13	09
5	Letters of rec--1							69	-04	-12	-05	03	07	03	16	03	-01
6	Letters of rec--2								-00	-18	07	07	05	09	05	-04	-05
7	Undergrad psych major									07	38	23	22	-16	-09	-31	-10
8	ACE department										-08	-14	-04	-12	-08	-05	04
9	Undergrad research											31	20	-01	-09	-19	-18
10	Psych work experience												11	08	07	-08	00
11	Research objective													02	03	-08	-05
12	Master's at entry														-05	45	40
13	Sex (female)															04	11
14	Age																47
15	Marital status (family)																

*$\underline{r} \geq .18$ for $p < .05$ level of significance with 121 df.

Table 4

Correlations among Traditional Predictors and Criteria of Graduate Success

(Decimal points omitted)

Predictors	Criteria: First year GPA	First year evalua	Years of study	Ph.D. in 4 years	Predictor $\bar{X}$	Predictor SD
Undergrad Jr-Sr GPA	20*	20*	-05	04	3.31	.42
GRE-V	03	-02	-16	-17	648	78
GRE-Q	02	-03	02	-06	647	85
GRE-psych	02	16	-02	04	641	65
Letters of rec--rater 1	09	18*	-10	-06	1.42	.81
Letters of rec--rater 2	08	11	-13	-03	1.40	.77
Undergrad psych major	07	25*	04	-04	.72	.45
Top-rated ACE dept	01	24*	08	-04	.59	.49
Undergrad research	07	07	10	12	.26	.44
Psych work experience	22*	12	03	04	.66	.48
Research objective	26*	13	-03	-02	.53	.50
Master's at entry	05	33*	13	34*	.13	.34
Sex (female)	17	-07	-14	-12	.31	.46
Age	-08	05	16	25*	23.8	3.1
Marital status (family)	13	18*	16	24*	.50	.67
First year graduate GPA		74*	40*	15		
First year evaluation			69*	48*		
Mean	3.35	1.48	2.96	.29		
SD	.48	.93	1.41	.46		

*$\underline{r} \geq .18$ for $p < .05$ level of significance with 121 df.

There was also a significant (.02 level) cross-tabulation between prior rejection and marital status: women admitted who were married with children were more likely to have been previously rejected. The only other significant finding was the association between undergraduate GPA and Rater 1's letter ratings: students with higher grades had better letters among the women. Knox, too, found that marital state at entrance to graduate school was highly related to completing the Ph.D., whereas single status was associated with withdrawal. She asked, "Does this represent a stability of personal goals that is in some way compatible with the married state?" Whatever the reason, that half of this sample which was married proved to be better risks than single students.

Table 5 reports the results of attempting to predict each of the selected criteria of graduate school performance from data available at admissions. In these analyses predictors up to five in number were selected so long as they reliably increased the multiple correlation. Prediction from these data had at best only modest accuracy. Possessing a master's degree at entry appears to be the outstanding characteristic of the successful entering student. Table 6 predicts later criteria of success from data available at the end of the first year of graduate study. The first year evaluation was strongly predictive both of longevity and of attainment of the Ph.D. It may be noted that first year GPA, letters of recommendation, having an undergraduate major in psychology and, in the case of the Ph.D. criterion, coming from a highly rated undergraduate school, all have negative weights. To the extent that those weights are reliably different from zero these variables act as suppressors. All four

Table 5

Prediction of Graduate Training Criteria from Admissions Data

	Predictor	Final β	Cum R^2
	Criterion: First Year GPA		
1.	Research objective	.24	.06
2.	Prior psych employ	.19	.10
	Criterion: First Year Evaluation		
1.	Master's at entry	.43	.11
2.	Undergrad psych major	.25	.20
3.	Top rated (ACE) department	.32	.27
4.	Jr-Sr GPA	.22	.33
5.	Letters of rec--1st rater	.18	.35
	Criterion: Years of Study		
	No significantly correlated predictors		
	Criterion: Ph.D. in Four Years		
1.	Master's at entry	.35	.11
2.	GRE Verbal	-.19	.15

Table 6

Prediction of Later Graduate Training Criteria

from Admissions and First Year Data

Criterion: Years of Study

	Predictor	Final β	Cum R^2
1.	First year evaluation	.96	.47
2.	Letter of rec--1st rater	-.23	.52
3.	514-515 grades	.17	.56
4.	First year GPA	-.31	.59
5.	Undergrad psych major	-.19	.62

Criterion: Ph.D. in Four Years

1.	First year evaluation	1.15	.23
2.	First year GPA	-.66	.33
3.	Top rated (ACE) department	-.32	.39
4.	Undergrad psych major	-.26	.44
5.	Letter of rec--1st rater	-.25	.50

explicitly or implicitly (see Table 5) are positive contributors to the faculty first year evaluation. A defensible inference from these two findings would be that all four of these are overweighted in the subjective, faculty, first year evaluation; at least, they are overweighted insofar as that evaluation is intended to be a predictor of subsequent graduate performance.

Conclusions

The most striking finding is the extent of attrition, that in the first four years of graduate study 35% of students selected to get Ph.D.s in psychology withdrew from school. Slightly less than half of these withdrawals were for academic reasons. The predictors in Table 4 and used in the multiple predictions in Table 5 suggest that none of the usually available admissions indices provides a way of forecasting this dropout. It should be noted, however, that these predictors may still have been good admissions instruments and well used for that purpose. This study has nothing to say about that large group of applicants who were denied admission. Were graduate academic success data available for the rejected students, undoubtedly the GRE and undergraduate grade point average would have been more predictive.

Once a student has been in graduate school for a year, however, it becomes much easier to predict his later performance. The first year evaluation, only done systematically by the graduate training committee for some classes, was highly related both to Ph.D. attainment and length of study. It seems a fair suggestion that this evaluation procedure become routine and that its demonstrated validity be put into practice, i.e., that if dropout is forecast, that the student be terminated earlier than is now

the practice. The first year evaluation was a good predictor in spite of the problem that, particularly among the women, withdrawals occur for reasons other than academic failure, the criterion towards which traditional predictors such as GRE, MAT, and GPA are presumably directed.

Despite a greater tendency to voluntarily terminate their graduate study, this investigation lends very little support to the idea that women are discriminated against in acceptance to graduate study in psychology. There is no evidence (Table 1) that they needed to demonstrate higher qualifications than the men to be accepted. Their higher undergraduate grades are a known fact of life, just as higher GRE-quantitative scores are among men. The only disquieting findings were (1) that married women with children may have encountered more difficulty in gaining admissions (higher incidence of prior discouragement), and (2) that women were offered significantly less financial support in their first year. These results do substantiate the claim by many female graduate students that subtle kinds of discrimination do exist and adversely affect their attitudes and performance in graduate school. Certainly such a subtle influence was obvious in the letters of recommendation written for this group of students (Lunneborg and Lillie, in press).

Something needs to be done about not only these subtle forms of discrimination against women, but about their very real proclivity to drop out of graduate school. Given the investment that society and the women themselves already have made in graduate education, institutions must accept a responsibility to counter the sources of voluntary withdrawal, for example, to counter the notion that a woman must immediately follow her employed husband when he takes a new job.

Above it was indicated that this study had little to say about the admissions process. That is not quite true. One of the ways of interpreting the high rate of voluntary withdrawal among women is to relate it to Astin's (1969) finding that women go to graduate school for reasons other than pursuing a career; fully one-third of her Ph.D.s also got them because going to school was fun. Lack of commitment to doctoral study may be the largest determiner not only of voluntary withdrawals but of involuntary withdrawals, and not only for women but for men. Interestingly enough, the best bet if one has to characterize the successful Ph.D. student at UW on the basis of these data is that he is an older married man with children and a master's degree upon entrance. In short, he highlights Astin's conclusion about an essential difference between men and women in their attitudes towards advanced training, that "...men are under heavy social and family pressure to advance educationally and occupationally whereas women are not.... (p. 43)." This is not to suggest that characteristics such as sex, age, marital status, or proven fertility, be used to select graduate students, but that present measures of capability need to be augmented by evidence of a high degree of commitment. In the present study, the master's degree served this purpose, and suggests that if a doctoral program wanted to cut their attrition drastically, it should accept only persons with prior master's degrees.

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Appendix

Letter of Recommendation Rating System

Rater 1 (Carol Lillie)

Factors toward a:

4 = general impression-outstanding, rare, grab them, can't go wrong

this comes from:

1. these words
2. person recommending is close friend of someone in UW dept.
3. extra long letter - person wants to tell you about this person
4. no negative comments whatsoever and no hesitations
5. letter usually begins right away talking about a specific high quality of S - as opposed to a statement or several sentences, i.e. "...this person was a student of mine for so long in such and such a class."
6. a definite feeling that the person recommending knows S and is personally excited about them
7. in general the feeling of a 4 letter is a feeling that the writer has subjective knowledge about S's superior objective ability

3 = general impression - very strong candidate, very solid with something extra for a bonus such as..."an occasional flash of genius or insight or capacity to think critically, often creative....", etc.

this comes from:

1. these words
2. the highness of academic position of person recommending S
3. a "full" letter - talking about the well-roundedness of S, their maturity
4. no negative comments and no hesitation
5. usually mentions fine academic performance
6. the difference between a 3 and a 4 letter is that 4 says you should take S beyond any doubt and a 3 says S will rate among the top of any who apply - no one can compare with a 4

2 = general impression - a very good candidate, has performed well, pretty solid

this comes from:

1. these words
2. medium length letter
3. no strong hesitations - if any, sympathetic
4. usually mentions in an objective way several awards or notations of achievement
5. person recommending S usually gives you the feeling that as far as they know S is a good and competent student and can see no reason why S should not be accepted
6. the difference between a 2 and a 3 is the strength and cohesion of the impression of S

1 = general impression - pretty good but usually with a slight feeling of hesitation, a definite feeling that there is a lack of knowledge of S, an incomplete or feeling of distance from S

this comes from:

1. these words
2. a shorter letter
3. lack of effort to express opinion about S
4. usually some negative feeling or hesitation
5. a mention of a good grade in class and/or other objective or known good qualities
6. a sketchy picture of S
7. usually recommends but there is a feeling of emptiness about it

0 = general impression - a definite hesitation or negative recommendation

this comes from:

1. saying "...has done well - but...."
2. S has emotional problems
3. feeling of real distance from S
4. doesn't know S very well
5. there are unexplained circumstances in S's situation
6. a generally doubtful or uninformative letter

Letter of Recommendation Rating System

Rater 2 (Virginia de Wolf)

A separate rating is made of each of five qualities: motivation, emotional stability, degree of recommendation, student's past achievement, and probable success. Four points in each quality represent the highest rating, 0 points the lowest. The average of these ratings is then corrected by adding weight according to the length of the letter, i.e., if there were 5 or less sentences written, .5 was subtracted from the average of the ratings. If more than 15 sentences were written, .5 was added to the average of the ratings.

Examples of ratings for the several qualities follow.

Motivation

4 point. One of the hardest workers I've known
Motivation is of the highest

3 point. Excellent motivation
Considerably above average in motivation

2 point. Above average in motivation
Strongly motivated
Keenly interested in continuing his advanced education
Well motivated
Good deal of motivation
Highly motivated
Sincerely motivated

1 point. Motivated
Has motivation
Motivation is average

0 point. My only reservation has to do with his motivation
His motivation for advanced work has fluctuated in the past
Unmotivated

Emotional Stability

4 point.

3 point. High degree of emotional stability
Very stable
Emotionally mature

2 point. Seems stable
Well-adjusted

1 point. Appears to me to settle down when he undertook the M.S. program

0 point. Lacks emotional maturity

Degree of recommendation

4 point. My highest recommendation
Highest possible recommendation
Most strongly recommend him
Recommend her very highly
My most enthusiastic endorsement
Recommend him to you in every respect

3 point. I strongly recommend him to you
Ideal candidate who I strongly recommend for your graduate program
Would recommend her highly if she were seeking admission here at Y Univ.

2 point. Pleasure to recommend such a competent person
Recommend with enthusiasm
Very pleased to recommend her
Wholehearted personal endorsement
Heartily recommend
Urge his acceptance

1 point. Recommend without reservation
My general evaluation is favorable
I recommend him for your serious consideration
I wish him well
Unqualified recommendation
I recommend him
She's worthy of support
She's worth a year's try

0 point. I regret that I know her too slightly to offer any evaluation of her
I know the student only slightly but....
I don't feel I know the candidate exceedingly well
I have only known her less than 6 months & therefore can't comment upon her
I don't know her as well as I should like since I had her in only one course
I haven't been terribly impressed with her work in psych
I have only known the student casually for about 6 months and do not feel that I can give a detailed evaluation of him.
I recommend her acceptance if space allows and if other applicants have lesser credentials (i.e. rec w/reservations)

Don't rate these statements as '0'

- (said by a non-psych prof) - I know lettle of her capacity for graduate work in psych because I taught her in _____

Quality of student's past achievements (either academic or psych job related)

4 point. Graduated summa cum laude
Outstanding contributor to a number of learning seminars during the summer
The psych dept. just voted her departmental honors when she graduates in June
Top student in three courses she had with me
She graduates Phi Beta Kappa
The best of those who have earned an M.A.
Capabilities in the highest regard
Among the top 5% of students here
One of our most promising men as far as psych research is concerned
Brilliant work in _____psych
Very top of the class
One of the brightest ever enrolled
Best reader I've had in 18 years
Top assistant I've ever had
Was exceptionally good

3 point. Excellent material for grad work in psych
Considerably above average in ability
In upper 5-10% of UG major I've known
Extremely capable
Distinguished student
Any statement which mentions student's achievement of advanced nature, ex:

was NSF UG research fellow
obtained 3.4 GPA in at least 12 hrs of research and adv. exp. courses in psych which would have carried grad credit and in which he was competing directly w/grad students
had presented the results of his rsch activities before dept'l seminar
creative sr. thesis - a sophisticated problem on...

Graduates magna cum laude
Capable of creative scholarship
Superior

2 point. Top 25% of class
Seems quite bright
Very bright
Considerable intellectual skill
She graduated cum laude
Had him in 1 course and he got an A in which he was competing w/far more advanced students
Highly gifted
As a TA his teaching is more than competent, but not brilliant

Quality of student's past achievements (either academic or psych job related) (Continued)

1 point. Adequate ability
A bright individual
Has intelligence
Has done well in some of the more difficult courses in the dept.
Generally makes a good showing
Has a good broad knowledge of psych for a UG student
Has a good academic record
Academic recovery made this last year (Disregard any qualifiers such as good acad. rec. or excellent acd. rec.)

0 point. Intellectual inadequacies
His performance has been spotty
He exhibited a certain degree of hostility to the material presented
His intellectual ability is not truly outstanding
He would merit careful watching the first year if you decide to accept him

Don't rate these statements as having any value:

Received an A in the only course she had with me (an A says nothing by itself and is different from similar stmt. in #2)

Probable Success

4 point. It is my considered judgment that she'd do outstanding work in psych at U.W.
Would be an exceptional grad student
Potential for outstanding work
Would be an outstanding PhD student
Will be near the top of graduate students in psych

3 point. Wish she would stay here
Selfishly I hope that she does not leave Y Univ.
If it weren't for Y Univ.'s policy to discourage our own UG's in staying on at Y for their grad work, I'd like to see her remain here.
I think that she'd make an excellent clinical psychologist
Should be able to make a valuable contribution to the field
Would be a credit to any institution granting her a degree
Would be a credit to the profession of psych
Would be an asset to your program

Probable Success (continued)

3 point (continued)

Can make a significant contribution in his own discipline
Would do creative research
Precisely the type we'd want to attract into teaching & research in psych
Would like him as my grad assistant and would like to direct his research
I would suggest offering her an assistantship
Superior
If she were not one of our own UG's, I'd seriously consider her admission here

2 point. Has the intellectual equipment to do very well in grad psych
Would make an above average student in psych
I feel he is able to earn a PhD without difficulty
I feel he is able to earn a PhD with little difficulty
She wants to be a _____psychologist and I'd expect she'd be a very good one
Should be encouraged to pursue grad school
Considerable potential as a researcher in experimental psych,
Potential as a professional psychologist is very high
Little doubt that the applicant has talent for adv. study and research in psych
Fine potential for grad work

1 point. Good chance for productive research
Should do well as a professional psychologist
Definitely PhD calibre
Everything I know of her indicates that she's a good risk
Has a deep enough commitment to complete the PhD and put it to work
I don't think that she has any limitations that would seriously limit her ultimate chances for successful study to the PhD
I'm confident that he can complete a grad program successfully
I'd believe he'd succeed in grad school
He has the potential to earn a PhD
Is grad school material
I don't think you'd make a mistake by accepting him into your program
Strong PhD candidate
Seems to have potential
I always believed she was PhD material
Promising teacher

Probable Success (continued)

0 point. Capable of M.S. but until I receive more data, I don't want to predict as to his capacity to achieve a PhD
Don't think he's interested in the kind of work which your program would entail
He's only interested in obtaining the M.S.
He was offered NSF in experimental as a UG and didn't seem interested in these options. It now strikes me as odd that he's applying to an exp psych PhD program